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**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding
Microgrids Pursuant to Senate Bill 1339 and
Resiliency Strategies.

Rulemaking 19-09-009

**SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) FILING IN
COMPLIANCE WITH ORDERING PARAGRAPH 4 OF DECISION 20-06-017**

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Dated: February 16, 2021

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In accordance with Section 4.1.3 and Ordering Paragraph 4 of Decision 20-06-017, Decision Adopting Short-Term Actions to Accelerate Microgrid Deployment and Related Resiliency Solutions, Southern California Edison hereby submits this compliance filing and report by February 16, 2021 describing actions taken to prioritize, streamline and expedite applications and approval for key resiliency projects.

Respectfully submitted,

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Attachment A

**SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) REPORT DESCRIBING
REQUIRED ACTIONS UNDER SECTION 4.1.3 OF DECISIONS 20-06-017**

SOUTHERN CALIFORNIA EDISON COMPANY'S REPORT

DESCRIBING REQUIRED ACTIONS UNDER SECTION 4.1.3 OF DECISION 20-06-017

In compliance with the California Public Utilities Commission's (Commission or CPUC) Ordering Paragraph (OP) 4 of Decision (D.) 20-06-017, *Decision Adopting Short-Term Actions to Accelerate Microgrid Deployment and Related Resiliency Solutions* (the Decision), Southern California Edison Company (SCE) hereby submits this compliance filing.

BACKGROUND

Ordering Paragraph 4 of the Decision requires the utilities to submit a compliance filing by February 15, 2021 that describes the results of the required actions, set by the Decision, for utilities to prioritize, streamline, and expedite applications and approval for key resiliency projects. SCE's compliance filing includes several elements required by the Decision, in addition to other elements requested by the CPUC's Energy Division staff. The Decision required SCE to include: 1) a description of the number of projects that utilized the interconnection proposals adopted in the Decision, 2) the success in meeting Rule 21 interconnection timeliness, 3) for any projects that experienced a delay, an explanation about why the project was delayed, and 4) the process for how utilities track the number and type of projects that use the template-based interconnection process adopted in Interconnection Proposal 1.¹

In the discussion section below, SCE discusses the four elements required by the original Decision and the additional questions Energy Division staff asked the utilities to include during a December 10, 2020 meeting.

DISCUSSION

The Decision required utilities to make three overarching improvements related to interconnection and use this compliance filing to discuss those improvements and their

¹ Decision at Ordering Paragraph (OP) 4.

usefulness in improving SCE's ability to meet interconnection timelines. These improvements, provided in Ordering Paragraphs (OPs) 1-3 of the Decision, include:

- Inclusion of pre-approved template single-line diagrams (SLDs) for the interconnection application process (OP 1);
- Process to accept videos, photos, and other methods of remote virtual inspection when a field inspection is deemed necessary (OP 2); and
- Compliance with increased interconnection staffing requirements of the Decision (OP 3).

For this compliance filing, only OP 1, including pre-approved template SLDs in the interconnection application process, applies to SCE and is addressed in this report. SCE has adopted and implemented use of virtual inspections increasingly over several years before the issuance of the Decision, and thus SCE already complies with OP 2 and, therefore, SCE's process to accept remote inspections was not altered by the issuance of this Decision. As stated in SCE's reply comments to the Track 1 Staff Proposal, SCE already makes use of photos, equipment technical information, and other information such as plot plans provided within the interconnection application process to determine that the equipment installed meets SCE requirements.²

Further, in compliance with OP 3, SCE submitted Advice 4275-E requesting exemption from the increased staffing requirements mandated by OP 3, describing various process and technical improvements SCE has undertaken to meet the interconnection timelines established in Rule 21, and plans for additional improvements. The Commission approved SCE's Advice 4275-E via disposition letter issued on November 24, 2020. As SCE did not implement any changes to its virtual remote inspection process or increase interconnection staffing because of this Decision, SCE does not discuss within this report any improvements that resulted from OPs 2 and 3 since the Decision's issuance. Therefore, this compliance filing addresses only the use of

² SCE's Reply Comments on Track 1 Microgrid and Resiliency Strategies Staff Proposal at p.4.

pre-approved template SLDs in the interconnection application process, as ordered by OP 1 of the Decision.

While SCE believes the information requested in this filing may be useful to some extent, SCE does not believe that the data herein represents SCE's improvements in its ability to interconnect projects in a timely manner. SCE acknowledges that template SLDs and virtual inspections can help streamline interconnection applications, but the timeliness of approving applications is not solely predicated on implementing these improvements. Rather, there are several other investor-owned utility (IOU)- and/or project developer-led actions in the interconnection process that affect overall project timeliness. SCE does believe that template SLDs can play a role in reducing such deficiencies, but assuming a direct correlation between implementing SLDs and a significant improvement in the overall processing time from application to Permission to Operate may neither be correct nor helpful. SCE discusses these issues further in the following responses:

I. Description of the number of projects that utilized the interconnection proposals adopted in this decision

SCE does not address the interconnection process enhancements made pursuant to OPs 2 and 3 in response to these questions, and instead focuses only on the proposal related to template SLDs in the interconnection applications process.

SCE implemented the template SLDs on August 18, 2020 in its interconnection portals- PowerClerk tool (PCI) for Net Energy Metering (NEM) projects and Grid Interconnection Processing Tool (GIPT) for Rule 21 projects. At that time, SCE did not have the functionality in PCI or GIPT to track whether applicants were using SCE's template SLDs in their interconnection applications or whether developers used their own SLD. SCE has since developed this tracking functionality, which is now in place as of February 4, 2021. However, for the purposes of this filing, SCE analyzed applications from the date of SLD issuance, August 18, 2020, to December 21, 2020, totaling approximately four months of data.

Despite the absence of this tracking functionality during the reporting period, SCE manually reviewed non-export non-NEM applications received via its GIPT online portal and found zero non-export, non-NEM applications that utilized SCE's template SLDs during those four months. Further, SCE queried NEM interconnection application attachments submitted via its PCI online portal by using the file name of the SLD attachment to determine whether SCE's SLD template was used in NEM interconnection applications. Only 59 out of 20,923 NEM applications over those four months appeared to use SCE's SLD. However, if applicants changed the file name of the template SLD in their interconnection applications, they would likely not have been counted in SCE's query. To address this issue, SCE sampled 100 random applications from the 20,923 received in that timeframe - removing the 59 projects that used SCE's template SLD file name - and manually reviewed each application to determine if the attachments were SCE's template SLDs. No applications from the 100 sampled used SCE's template SLD. Based on the results of this query and sample, SCE assumes that if the attached SLD has a different name than SCE's template SLD, the applicant did not use SCE's template SLD.

Though an imperfect method, SCE believes this review accurately depicts how many projects used SCE's template SLDs between August 18, 2020 and December 21, 2020. Given the low usage rate of SCE's template SLDs since implementation, SCE is cautious about using this data to make conclusions on the effect of using template SLDs on the overall project timeliness.

In sum, SCE received 20,923 NEM applications and 27 applications for Rule 21 non-exporting projects from the time SCE issued the SLDs on August 18, 2020 until December 21, 2020. SCE received zero Rule 21 non-export applications utilizing SCE's template SLD and received a total of 59 projects that utilized SCE's template SLD in the NEM interconnection process, representing 0.28% of all NEM interconnection applications.

| Project Type | Quantity of Projects | Total Capacity | Project Status |
|----------------------------|-----------------------------|-----------------------|---|
| NEM Photovoltaic (PV) Only | 58 | 310.114 kW | 35 – Permission to Operate 21 – Pending Final Documents * 1 – Pending Permanent Service 1 – Technical Review |
| NEM-Paired Storage | 1 | 3.703 kW | 1 – Permission to Operate |

* Pending documents could include executed interconnection agreement or final inspection.

II. Success in meeting Rule 21 interconnection timeliness

Although SCE supports the interconnection improvements required by the Decision, these improvements may not directly lead to improved timeliness to process interconnection applications. The purpose of template SLDs is to remove one area of potential deficiency in an interconnection application, but there are many other ways an application can be deficient. Further, application review is only one step of many in the overall interconnection process. While template SLDs and remote virtual inspections can help facilitate the interconnection process, they are not a panacea that will result in improved timeliness across the entire interconnection process.

At Energy Division's request, SCE reiterates its comments from Advice 4275-E that new requirements to hire additional staff may not be the most effective way to immediately improve the processing speed of interconnection applications. While SCE supports expediting the interconnection process, hiring additional staff is time- and labor-intensive and is not necessarily helpful. Hiring interconnection and engineering staff can take at least three to six months, with up to four additional weeks of initial training and 12 months of on-the-job training needed for each new staff member to achieve full productivity. As discussed in Advice 4275-E, SCE has already undertaken various process and technical improvements to meet interconnection timelines established in Rule 21 and has additional planned improvements in the future.

III. If any project experienced a delay, the utility shall provide an explanation about why the project was delayed

It is important to note that the use of SLDs does not reduce overall processing time, but rather reduces the chances that an interconnection application is rejected due to a deficiency in the application. At the time of issuance of the SLDs, SCE did not have the functionality to track Rule 21 project delays in its GIPT portal. SCE has deployed this functionality as of January 2021 and will be able to track delays of Rule 21 interconnection applications going forward. However, SCE does have the ability to track delays of NEM interconnection requests, and provides that data to the Commission on a quarterly basis.

As conveyed in SCE's quarterly report to the Commission, in Q4 of 2020, SCE processed 15,091 of 15,200 NEM interconnection requests within such timeframe, achieving a 99.3% success rate. This very high success rate demonstrates SCE's ability to process the vast majority of interconnection applications in a timely fashion. Any concerns around delays are largely unwarranted, few and far between, and almost always associated with a more specific or complex project or issue.

In the tables and discussion below, SCE summarizes the NEM applications that experienced a delay in Q4 2020. At Energy Division's request, SCE includes information on project type and capacity, length of delay, reason for delay, SCE's resolution to the delay, and why additional staffing would not have made a substantive difference in the length of delay.

| Project Type | Capacity | Length of Delay | Cause of Delay and Utility Response | Delay Resolution |
|----------------------------------|-----------------|---|---|--|
| NEM PV (109 delayed projects) | 365.772 kW | 51 projects: 46 – 60 days 58 projects: ≥ 61 days | 104 – Permanent service not established; 2 – Technical Review by Field Engineering Required 3 – Various reasons detailed below. | Please see description of delay resolutions below. |

| Reason for Delay | Description | Resolution |
|--|--|---|
| Permanent service not established | SCE allows applicants to submit an interconnection request (IR) without permanent electrical service; Permission to Operate (PTO) cannot be issued, however, until the service is established. | SCE's interconnection team typically tracks these accounts and works closely with metering and billing departments to immediately issue PTO once service is established. |
| Technical review by Field Engineering required | While a project may be deemed complete, there may be a potential Electrical Service Requirement (ESR) violation or other safety concern that may have been identified. | SCE works with the installer to schedule an onsite inspection to evaluate potential concern and next steps. The two applications in this category in the Q4 report have since received PTO. |
| Duplicate application submitted | SCE allows only one active IR for a proposed system at one time; as part of initial review, SCE runs cross checks to ensure application is not a duplicate. In this specific instance, the customer had started a contract with two installers and one contractor submitted the project as new meter, changing the Service Account at a later point in time. The duplicate was identified, and customer had to decide which application would stay active. | Customer must decide which application will stay active. For this one project, customer made decision and PTO was eventually issued. |
| Net Generation Output Meter (NGOM) Installation Required | Planning could not schedule a date to meet with solar contractor / customer to install NGOM. | Planning cannot install NGOM until a date for installation is agreed to with the installer / customer. The single project in this category in the Q4 report has since received PTO. |
| Commissioning Test Required | Commissioning test date has not been scheduled. | Commissioning test requires an agreed-upon, scheduled date between SCE and customer. This single project has since received PTO. |

In Q4 of 2020, 104 of the 109 delays occurred because permanent service had not been established. As SCE is not at fault for causing this type of delay and SCE's interconnection teams cannot prevent such a delay, additional staff would not be able to help expedite

interconnection application processing times for those delayed applications. Further, as explained in the above table, the other five delayed projects have since received PTO and were resolved as expeditiously as possible. Between the 15,091 interconnection applications SCE processed on time and the 104 of 109 SCE could not have helped expedite further, only five of 15,200 total applications remain. Hiring additional staff to assist with these remaining 0.03% of interconnection applications would have not made a material difference in reducing interconnection application delays and, therefore, is not necessary at this time.

IV. The utilities shall track the number and type of projects that use the template-based interconnection process adopted in Interconnection Proposal 1

As discussed above, 59 of 20,923 NEM projects utilized SCE’s template SLDs between August 18, 2020 and December 21, 2020 while no non-export non-NEM Rule 21 projects did. At Energy Division’s request, SCE provides additional information on those projects below.

| SLD Type | Total Project Capacity | Total Project Quantity |
|--|-------------------------------|-------------------------------|
| NEM PV < 30 kVa | 310.114 kW | 58 |
| NEM PV < 30 kVa with ES < 10 kVa | 3.703 kW | 1 |
| NEM PV between 10-30 kVa with ES < 10 kVa | 0 | 0 |
| Rule 21 non-export < 10 kVa, Protection Option #3 | 0 | 0 |
| Rule 21 non-export < 10 kVa, Protection Option #6 | 0 | 0 |

In addition, no applicants or developers have raised complaints regarding SCE’s template SLDs since their issuance. At this time, SCE does not believe additional template SLDs are needed to assist with interconnection application timeliness. As SCE described in its opening comments on the Track 1 Staff Proposal, SCE supports use of an 80:20 guideline by which

provided design templates are acceptable for 80% or more of interconnection projects.³ SCE currently provides template designs for Rule 21 non-export storage, NEM plus paired storage, and NEM solar projects, which cover a vast majority of the applications received (over 90% based on 2019 interconnection requests). Further, SCE believes the focus of interconnection improvements is to expedite implementation of Rule 21 non-export storage, NEM plus paired storage, and NEM solar systems, as these can provide the greatest benefit to enhancing system resiliency, whereas other types of projects may only yield marginal benefits. Therefore, SCE does not believe additional template SLDs for additional technologies are needed.

V. Virtual Inspection

In response to Energy Division's additional questions, since the issuance of the Decision, SCE performed virtual inspections for all projects that qualified. SCE did not perform any field inspections in instances where virtual inspections could have occurred.

VI. Use of SCE's Rule 21 Non-Export < 10 kVA, Protection Option #3 SLD

As discussed in the response to Question 1, and in response to Energy Division's additional questions, SCE has received no applications utilizing SCE's Template SLDs for Rule 21 Non-Export projects used with Protection Option #3. At this time, SCE believes the service panel rating limit is not an issue for developers and further modifications to this SLD template are unnecessary.

³ Southern California Edison Company's (U 338-E) Comments on Track 1 Microgrid and Resiliency Strategies Staff Proposal, pp. 10, 17.